

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-20 (Canceled)

21. (New) A shark cartilage extract with anti-PHF activity, wherein the shark cartilage extract is produced by the following steps:

extracting cleaned, dried, ground shark cartilage with H<sub>2</sub>O at a temperature between 85-120°C for 2-4 hours,

centrifuging the resulting suspension 1 at between 5200 to 5700 rpm to separate the suspension into supernatant 1 and pellet,

holding the supernatant 1 in a cooling tank 4-8°C,

extracting the pellet a second time with H<sub>2</sub>O at a temperature between 85-120°C for 2-4 hours,

centrifuging the resulting suspension 2 at between 5200-5700 rpm to separate the suspension into supernatant 2 and pellet;

pooling supernatant 1 with supernatant 2, and

lyophilizing the pooled supernatants to obtain the shark cartilage extract.

22. (New) The shark cartilage extract according to claim 21, further comprising cooling said suspension 1 and suspension 2 to between 40-60°C when said suspensions are at a temperature greater than 60°C.

23. (New) A pharmaceutical composition comprising shark cartilage extract with anti-parathyroid hypertensive factor activity according to claim 21 and a pharmaceutically acceptable carrier.

24. (New) A pharmaceutical composition comprising shark cartilage extract with anti-parathyroid hypertensive factor activity according to claim 21, an antihypertensive substance and a pharmaceutically effective carrier.

25. (New) The extract according to claim 21, wherein said extract is composed of 5-30% protein, 15-80% mucopolysaccharides and 1-20% Chondroitin Sulfate C.

26. (New) A method for treating hypertension comprising administering to a patient in need of such treatment, an anti-hypertensive effective amount of shark cartilage extract according to claim 21.

27. (New) The method according to claim 26, wherein said amount is 0.1-20 mg/kg body weight.

28. (New) A method for treating a disease related to excessive PHF comprising administering to a patient in need of such treatment, an amount of shark cartilage extract according to claim 21 effective to treat said disease.

29. (New) A method for treating a disease related to intracellular calcium elevation comprising administering to a patient in need of such treatment, an amount of shark cartilage extract according to claim 21 effective to treat said disease.

30. (New) A method for counteracting the activity of parathyroid hypertensive factor, comprising administering an effective amount of shark cartilage extract according to claim 21 with anti-parathyroid hypertensive factor.

31. (New) A method for producing a purified shark cartilage extract with anti-parathyroid hypertensive factor activity, comprising the steps of:

extracting cleaned, dried, ground shark cartilage with H<sub>2</sub>O at a temperature between 85-120°C for 2-4 hours,

cooling the resulting suspension to between 40-60°C, centrifuging the cooled suspension at between 5200-5700 rpm to separate the suspension into supernatant 1 and pellet,

holding the supernatant 1 in a cooling tank at 4-8°C,

extracting the pellet a second time with H<sub>2</sub>O at a temperature between 85-120°C for 2-4 hours,

cooling the resulting suspension to between 40-60°C,

centrifuging the cooled suspension at between 5200 to 5700 rpm to separate the suspension into supernatant 2 and pellet,

pooling supernatant 1 with supernatant 2, and

spray drying the pooled supernatants to obtain the shark cartilage extract.

32. (New) The method according to claim 31, wherein said extracting steps are conducted at 95°C for 2 hours.

33. (New) The method according to claim 31, wherein a decanter centrifuge is used in said centrifuging steps.

34. (New) The method according to claim 31, further comprising concentrating the pooled supernatants until a solids content of between 8-10% is reached.

35. (New) A method for inhibiting vascular smooth muscle cell proliferation, comprising administering to a patient in need of such treatment, an amount of the extract according to claim 21 effective to inhibit vascular smooth muscle cell proliferation.